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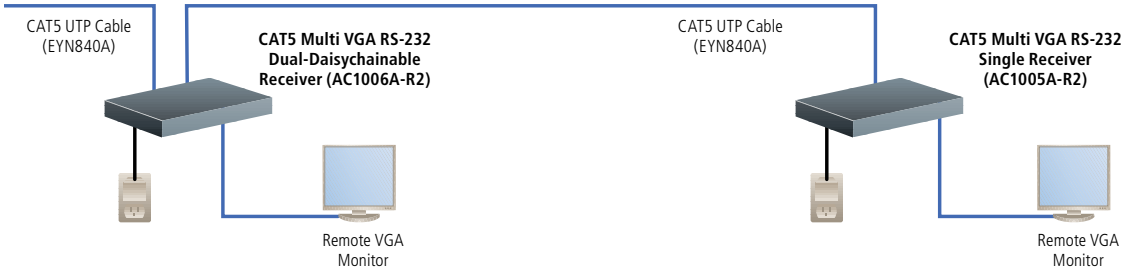
CAT5 Multi VGA System

VGA video plus audio—or VGA video plus serial data—over convenient, inexpensive CAT5 cable.

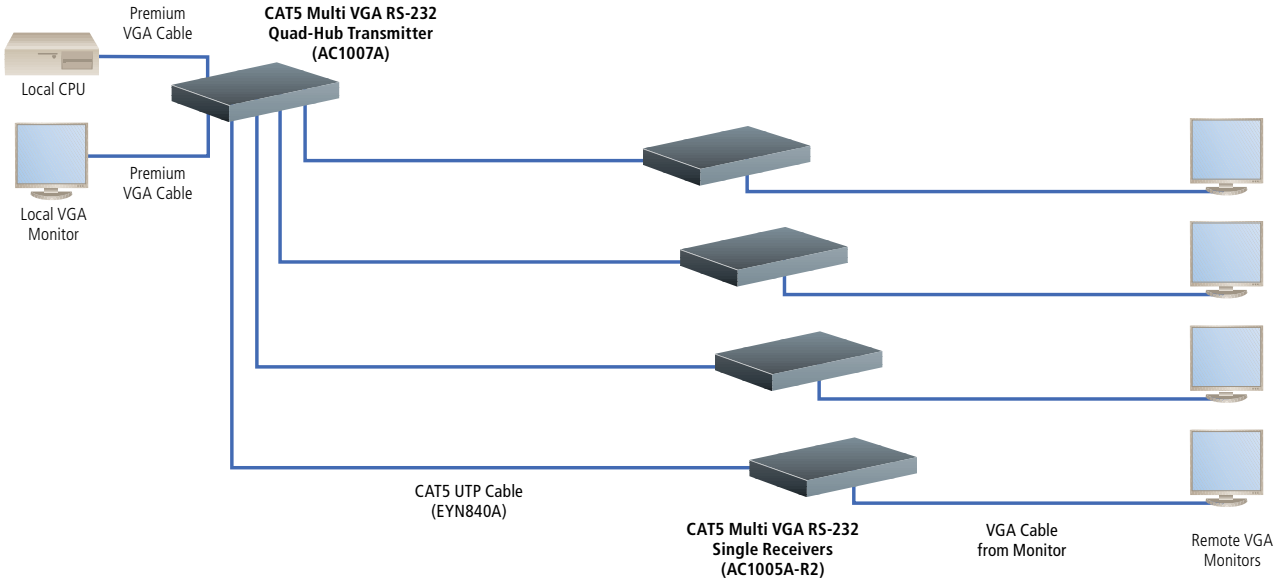
FEATURES

- High-quality VGA transmission over CAT5 cable.
- Units function as video splitters and extenders.
- Send video and audio or video and data up to 500 feet (152.4 m).
- Distances of up to 1000 or 1500 feet (304.8 or 457.2 m) with skew compensation models.
- Mix and match topologies with the same transmitter.
- Ideal for retail, market expos, trade shows, education, and more.

A Dual-Daisychainable Receiver is used when the same signal is distributed to multiple display devices on a single CAT5 cable in a daisychain or loop-through topology.


CAT5 UTP Cable (EYN840A)
CAT5 Multi VGA RS-232 Dual-Daisychainable Receiver (AC1006A-R2)
Remote VGA Monitor
CAT5 UTP Cable (EYN840A)
CAT5 Multi VGA RS-232 Single Receiver (AC1005A-R2)
Remote VGA Monitor

Use the Quad-Hub Transmitter to send the same video signal to up to four receivers and VGA video monitors. A star topology is shown.


Premium VGA Cable
CAT5 Multi VGA RS-232 Quad-Hub Transmitter (AC1007A)
Local CPU
Premium VGA Cable
Local VGA Monitor
CAT5 UTP Cable (EYN840A)
CAT5 Multi VGA RS-232 Single Receivers (AC1005A-R2)
VGA Cable from Monitor
Remote VGA Monitors

OVERVIEW

Looking for a great way to transmit VGA video, audio, or RS-232 signals? Consider the CAT5 Multi VGA System. System components use ordinary Category 5 cable.

The CAT5 Multi VGA System is versatile and ideal for digital signage or for applications using audio and visual communications. Use the system for touch screens, signs, classrooms, and more. With CAT5 cable so prevalent, there are a variety of applications in which you can use this system!

Flexible system configuration.

Other systems limit you to a single topology, which can limit you from getting really creative. But with the system's Quad-Hub Transmitters and Dual-Daisychainable Receivers with Skew Compensation, you can mix and match different topologies!

For example, you can connect individual receivers to Ports 1, 2, and 3 of a Quad-Hub Transmitter, creating a star topology. But you can use Port 4 on the transmitter to connect to a Dual-Daisychainable Receiver with Skew Compensation— which in turn can connect to other Dual-Daisychainable Receivers with Skew Compensation until the last connected unit is a single receiver—to create a daisychain topology.

You'll like the sound of this VGA system!

If you want to make sure your point gets made, opt for the audio version of the CAT5 Multi VGA System. With it, you can create virtual signs that enable your audience to hear and see your message. And that will make things memorable.

The audio version broadcasts video plus line-level mono audio from your computer to as many as 100 computer monitors up to 500 feet (152.4 m) away. Just think of the impact you can create by broadcasting to as many monitors as needed.

Total message control.

The RS-232 version of the CAT5 Multi VGA System enables you to add serial devices. It can be used to control displays and is ideal for touch screens at marketing kiosks or trade shows. You can configure units for two-way serial communi-cations so they can be used for information gathering and Q&A interaction.

With LCD or plasma displays, you can display text messages along with your video to multiple monitors. You can also display text with video when you use the RS-232 units with VGA projection systems.

High-def models (AC1045A–AC1046A) support high-definition video and feature Sony/Philips Digital Interface (SPDIF) audio.

For distances up to 500 feet (152.4 m), select the AC1047A-R3–AC1048A-R3 receivers. For greater distances (up to 1000 feet [304.8 m] or 1500 feet [457.2 m]), choose the AC1013A–AC1014A receivers. They also work with the AC1000A-R2 (Single) or AC1003A (Quad-Hub) transmitters.

Skew compensation.

Audio (AC1013A–AC1014A) and RS-232 receivers (AC1015A-R2, AC1016A) are available with 32 nanoseconds of skew compensation on each of the color lines. This enables video cable runs of up to 1000 or 1500 feet (304.8 or 457.2 m).

You get full-modem serial control at 19.2 kbps and video to 1000 feet (304.8 m), or simplex serial control at 19.2 kbps and video to 1500 feet (457.2 m).

And skew compensation models provide superior resolution.

Plus our Twin Video Display Receivers (AC1071A–AC1072A) provide dual audio and video outputs—perfect for applications with paired displays. The AC1072A is daisychainable and enables you to address a series of 4 to 24 back-to-back displays. Maximum source-to-display distance over CAT5 UTP is 500 feet (152.4 m) for computer video, 750 feet (228.6 m) for HDTV or Component video, and 1000 feet (304.8 m) for Composite or S-Video.

Multiply your signals.

Use the CAT5 Multi 1 x 9 Video Distribution Amp (AC1050A) to distribute Composite, Component, and computer video, along with audio and serial signals, to nine displays. Plus you can daisychain it to support thousands of displays. It takes only 1U of rack space.

LEDs tell you connection status. Rackmount brackets are included.

Technically Speaking

In data communications applications, using products that exceed required capacities is usually not a problem. For example, if a 28.8-kbps modem is required, a 33.6-kbps or 56-kbps modem will work just fine.

But sometimes more isn't better. For instance, the CAT5 Multi VGA System is designed to expect CAT5 and only CAT5 cable. You'd probably guess that Category 3 cable wouldn't be effective with these products, and you'd be right. But you may also assume that if Category 5 cable works just fine, Category 5e, Category 6, and other higher-capacity cables would work even better. This isn't the case.

The CAT5 Multi VGA System is designed specifically for the Category 5 specs defined by the TIA/EIA standard. Higher-level cables, such as CAT5e, have different characteristics and specs. Although differences like twist ratios might seem small, they can have a negative impact on the system's components, which are expecting a true Category 5 transmission.

AC1000A-R3 AC1013A

TECH SPECS

Audio Bandwidth —
AC1000A-R3, AC1003A: Mono audio, 20 Hz to 30 kHz; AC1013A–AC1014A, AC1015A-R2, AC1016A: Combined left and right mono audio
Audio Input Impedance — AC1003A: 600 ohms
Audio Input Level (Maximum) — AC1003A: 1.5 volts RMS (11.48 dBmW @ 1 kHz)
Enclosure — Steel
Resolution and Distance (Maximum) —
AC1000A-R2, AC1003A, AC1004A-R2, AC1007A, AC1071A–AC1072A: 2048 x 1536 @ 70 Hz;
AC1001A-R2: 1366 x 768 at 500 ft. (152 m);
AC1002A-R3, AC1015A-R2: 1920 x 1200 at 600 ft. (183 m);
AC1013A: 2048 x 1536 @ 70 Hz at 1000 ft. (304.8 m);
AC1014A: 2048 x 1536 @ 70 Hz at 1000 ft. (304.8 m), 1600 x 1200 @ 70 Hz at 1500 ft. (457.2 m);
AC1045A–AC1046A: 2048 x 1536 @ 70 Hz, SD and HDTV formats (480i, 480p, 525p, 720p, 1080i, 1080p);
AC1047A-R2, AC1048A-R3, AC1005A-R3, AC1006A-R2: 1600 x 1200 @ 75 Hz at 400 ft. (121.9 m), 1280 x 1024 @ 75 Hz at 500 ft. (152.4 m);
AC1016A: 2048 x 1536 @ 70 Hz at 1000 ft. (304.8 m), 1600 x 1200 @ 60 Hz at 1500 ft. (457.2 m);
AC1050A: 2048 x 1536 or 1600 x 1200
Video Signals Supported — RGBHV, RGBS, RGsB
Serial Interface — Async, simplex, or full-duplex data rates up to 19.2 kbps
Connectors —
Transmitters: AC1000A-R3, AC1045A: (1) 3.5-mm F, (1) RJ-45, (2) HD15 F;
AC1003A, AC1046A: (2) 3.5-mm F, (4) RJ-45, (2) HD15 F;
AC1004A-R2: (1) DB9 F (DCE), (1) RJ-45, (2) HD15 F;
AC1007A: (1) DB9 F (DCE), (4) RJ-45, (2) HD15 F;
Receivers: AC1001A-R2: (1) 3.5-mm, (1) RJ-45, (1) HD15 F;
AC1002A-R3: (1) 4-pin phoenix, (2) RJ-45, (1) HD15 F;
AC1047A-R2: (1) 3.5-mm F, (1) RJ-45, (1) HD15 F;
AC1013A–AC1014A, AC1048A-R3: (1) 3.5-mm F, (2) RJ-45, (1) HD15 F;
AC1005A-R3: (1) DB9 M (DTE), (1) RJ-45, (1) HD15 F;
AC1006A-R2, AC1015A-R2, AC1016A: (1) DB9 M (DTE), (2) RJ-45, (1) HD15 F;
AC1071A–AC1072A: (2) HD15 F, (2) 3.5-mm jacks, (1) RJ-45; AC1072A also has an additional RJ-45;
AC1050A: (1) RJ-45 input, (9) RJ-45 output
Temperature Tolerance —
Operating: 32 to 104°F (0 to 40°C);
Storage: -4 to +140°F (-20 to +60°C)
Relative Humidity — Up to 80%, noncondensing
Power — 100 to 240 VAC, 50 to 60 Hz, autosensing, external;
AC1001A-R2, AC1002A-R3: 5 VDC;
AC1050A, AC1015A-R2: 5 V regulated, external
Size — AC1000A-R3, AC1004A-R2, AC1005A-R3, AC1006A-R2: 1.2"H x 4.1"W x 4.3"D (3 x 10.4 x 10.9 cm);
AC1001A-R3: 0.9"H x 3.1"W x 3.8"D (2.2 x 7.9 x 9.5 cm);
AC1002A-R3, AC1015A-R2: 1.2"H x 5.5"W x 3.6"D (3 x 14 x 9.2 cm);
AC1003A, AC1007A, AC1045A–AC1046A, AC1047A-R2, AC1048A-R3: 1.2"H x 5.6"W x 4.5"D (3 x 14.2 x 11.4 cm);
AC1013A–AC1014A, AC1016A: 1.2"H x 5.4"W x 6.1"D (3 x 13.7 x 15.5 cm);
AC1071A–AC1072A: 1"H x 4.2"W x 3.8"D (2.5 x 10.7 x 9.7 cm);
AC1050A: 1.75"H x 8.1"W x 6.5"D (4.5 x 20.6 x 16.5 cm)
Weight — AC1000A-R3: 0.8 lb. (0.4 kg);
AC1003A, AC1007A: 1.4 lb. (0.6 kg);
AC1002A-R3, AC1004A-R2, AC1006A-R2, AC1013A–AC1014A; AC1015A-R2, AC1016A: 1 lb. (0.5 kg);
AC1001A-R2, AC1071A–AC1072A: 0.6 lb. (0.3 kg)

Item	Code
CAT5 Multi VGA System	
Audio Version	
Transmitters	
Single	**AC1000A-R3**
Quad-Hub	**AC1003A**
Receivers	
Video/Audio, 500-ft.	**AC1001A-R2**
Daisychainable Video/Audio, 600-ft.	**AC1002A-R3**
Dual-Daisychainable with Skew Compensation Video/Audio, 1000-ft.	**AC1013A-R2**
Video/Audio, 1500-ft.	**AC1014A-R2**
RS-232 Version	
Transmitters	
Single	**AC1004A-R3**
Quad-Hub	**AC1007A**
Receivers	
Single, 500-ft.	**AC1005A-R3**
Dual-Daisychainable, 500-ft.	**AC1006A-R2**
Dual-Daisychainable with Skew Compensation Video/Data, 1000-ft.	**AC1015A-R2**
Video/Data, 1500-ft.	**AC1016A**
Twin Video Display	**AC1071A**
Twin Video Display—Daisychainable	**AC1072A**
CAT5 Multi Component High-Def Video and SPDIF Audio	
Transmitters	
Single	**AC1045A**
Quad-Hub	**AC1046A**
Receivers	
Single, 500-ft.	**AC1047A-R2**
Dual-Daisychainable, 500-ft.	**AC1048A-R2**
CAT5 Multi 1 x 9 Video Distribution Amp	**AC1050A**
To rackmount your CAT5 Multi VGA System, order…	
Rackmount Brackets	
for Single Transmitters or Both Receiver Types	
1 Unit	**AC1008**
4 Units	**AC1009**
8 Units	**AC1010**
for Quad-Hub Transmitters	
3 Units	**AC1011**
To connect audio units to computer equipment…	
3.5-mm Plug to 3.5-mm Plug, 24 AWG Stereo Cable	
10-ft. (3-m)	**EJ110-0010**
To connect RS-232 units to computer equipment…	
DB9 Serial Mouse Extension Cable, 10-ft. (3-m), Male/Female	**BC00230**
DB9 Extension Cable (with EMI/RFI Hoods), 10-ft. (3-m), Male/Female	**EDN12H-0010-MF**
To connect transmitters and receivers up to 450 feet…	
Category 5 Unshielded Bulk Cable, 100-MHz, Solid, 4-Pair, PVC, Beige, 1000-ft. (304.8-m), Spool	**EYN840A-1000**